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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/612,245

07/02/2003

Hans Schwade

4C16.1-011

3307

35725

7590

04/27/2004

MEHRMAN LAW OFFICE, P.C.  
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EXAMINER

WILSON, GREGORY A

ART UNIT

PAPER NUMBER

3749

DATE MAILED: 04/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/612,245	Applicant(s) JAMEEL ET AL.	
	Examiner Gregory A. Wilson	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-31 and 33-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-20 and 33-37 is/are allowed.
- 6) ☒ Claim(s) 1,2,21,27 and 28 is/are rejected.
- 7) ☐ Claim(s) 3-10,22-26 and 29-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities:

On page 5, line 35, change "cold" to --could--.

Appropriate correction is required.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 2, 21, and 27 have been considered but are moot in view of the new ground(s) of rejection. Applicants' remarks that the invention overcomes the inconvenience and maintenance involved in plug switching as described in Booher et al and that the lance of the invention can be used to clean with either water or steam without having to remove a device, is not persuasive, since applicant has not claimed a sootblower that switches between water and steam without having to remove a device from or install a device in the sootblower. Booher et al teaches two sets of nozzle types, one for water and one for steam, they are independently controlled and operate as the cleaning requirement dictate. In Figure 4 of Booher et al, a configuration is shown in which nozzles (52, 54) are simultaneously operating, one for ejecting water (nozzle 54) and the other for ejecting steam (nozzle 52).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 2, 21, and 27** are rejected under 35 U.S.C. 102(b) as being anticipated by **Booher et al (5,509,607)**. **Booher et al** discloses a sootblower (10) for cleaning internal structures of combustion devices (ie: boilers) and includes a lance tube (14) having two separately controlled cleaning fluid applicators (nozzles 52, 54), the lance rotates as it delivers cleaning fluid (SEE column 3, lines 61-63), a drive system (SEE column 4, lines 8-13), a control system (SEE column 5, lines 6-9), a steam tube (16) on which the lance tube is telescopically received, multiple steam nozzles (Figure 3) for directing steam out of the lance tube, a steam valve (38) for controlling the delivery of steam, and a carriage (18) propelled by the drive system.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Booher et al (5,509,607)** in view of **Carter et al (5,096,502)**. **Booher et al** discloses the applicant's primary inventive concept as stated above, but does not particularly teach a boiler monitoring equipment including a boiler camera which works with the control system to activate the sootblower to perform a cleaning operation. **Carter et al** teaches an automatic cleaning system (lance control system) monitoring equipment which derives the furnace wall emissivity (which represents an unclean furnace, ie: ash accumulation), the water lance is initiated (SEE column 2, lines 17-25) by a sensor on a furnace wall, a control system receives signal from sensor which automatically activates the water lance to clean boiler interior and in an alternative embodiment, **Carter et al** discloses a boiler camera to measure wall reflectivity or temperature, this in turn is used to control operation of the water lance (SEE column 2, lines 8-16). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have modified the sootblower lance tube of **Booher et al** to include a boiler camera as taught by **Carter et al** for the purpose of observing the conditions in a boiler during cleaning.

***Allowable Subject Matter***

**Claims 11-20 and 33-37** are allowed.

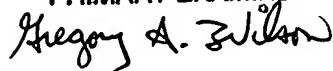
**Claims 3-10, 22-26 and 29-31** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory A. Wilson whose telephone number is (703) 308-1239. The examiner can normally be reached on 7 am - 4:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on (703)308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GREGORY WILSON  
PRIMARY EXAMINER



Gaw  
April 25, 2004